Environmental Bulletin
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Long Range Comprehensive Plan serves as blueprint for Site's future

The recently completed *SRS Long Range Comprehensive Plan Discussion Draft* spans development of the site over the next 50 years. It includes chapters on Savannah River Site (SRS) missions, future land use, facilities, infrastructure, natural resources, cultural resources, and long term stewardship. Each chapter contains explanations, maps, and charts depicting current status and projections, providing an informative look into the future. It serves as the reconfiguration plan for the site, providing a blueprint for future development and shows the proposed footprint of how the site could look in the coming decades.

As shown in the adjacent "Planning Pyramid," the *SRS Long Range Comprehensive Plan* is a detailed document that provides a vision of how the *SRS Strategic Plan* is to be implemented.

The *SRS Long Range Comprehensive Plan* drives and focuses additional studies required for decision making. The results of these focused studies may guide revision of the planning assumptions made in the *SRS Strategic Plan* and the *SRS Long Range Comprehensive Plan*. As decisions are made, detailed implementation plans will be developed to outline the cost, schedule, and scope of actions needed for implementation and help assure effective, efficient, and consistent site development.

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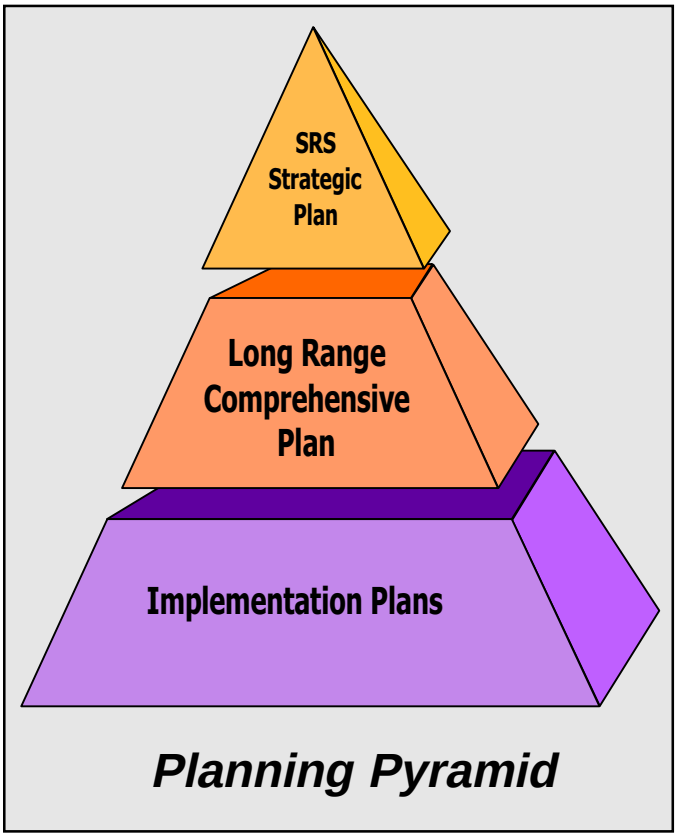
Because planning is an ongoing iterative process, the *SRS Long Range Comprehensive Plan* is a living document, in that it was published as a "discussion draft" to emphasize the dynamic nature of the planning process, and it will be updated as conditions or assumptions change.

The plan is available on the SRS external home page under "Programs" at http://sro.srs.gov. A limited number of compact disks and hard copies of the plan are also available, on request, by contacting Jim Moore at 1-800-249-8155 or by e-mail to jim02.moore@srs.gov.



Joint effort by DOE and Air Force

EA considers DOE sites for storage of RTGs

The Department of Energy and the Air Force will soon prepare an environmental assessment that will address (1) the removal and transport of 10 Strontium 90 (^{90}Sr) radioisotopic thermoelectric generators (RTGs) from Burnt Mountain Seismic Array Observatory in Alaska to either a designated site within the U.S. Department of Energy (DOE) Complex or an Air Force transshipment site if necessary, and (2) the selection of a DOE long-term storage site for these 10 RTGs as well as up to 50 other ^{90}Sr RTGs located throughout the United States. It is anticipated that the draft EA will be available in March 2001. The retrieval of the Alaskan RTGs and the selection of a storage site are components of DOE's efforts to recover all excess and unwanted RTGs and store them in a safe and secure manner pending development of a licensed disposal site for such radioactive sealed sources.

DOE is responsible for disposing of the RTGs as a subset of *Greater-Than-Class-C low-level waste* (GTCC LLW) under the *Low-Level Radioactive Waste Policy Amendments Act of 1985* once they are no longer useful and no future recycle or reuse opportunity exists. DOE has stated to Congress that it will accept certain inventories of GTCC LLW for storage in advance of disposal becoming available. Potential DOE storage sites include: Hanford Site, WA; Idaho National Engineering and Environmental Laboratory, ID; Kansas City Plant, MO; Los Alamos National Laboratory or Sandia National Laboratories, NM; Nevada Test Site, NV; Oak Ridge Reservation, TN; Pantex Plant, TX; or Savannah River Site, SC.

Comments and requests for further information should be addressed to:

Mr. Robert A. Campbell, EM-22, Office of Technical Program Integration, U.S. Department of Energy, e-mail: ROBERT.CAMPBELL@em.doe.gov, telephone: (678) 585-9565 or Major Deborah Determan, Air Staff Action Officer, U.S. Air Force, telephone: (703) 695-1358; e-mail: Deborah.determan@pentagon.af.mil.

Public meeting, public comment period set for RCRA Part B permit renewal for the MWMF

The U.S. Department of Energy (DOE)-Savannah River Operations Office has requested from the South Carolina Department of Health and Environmental Control (SCDHEC) modifications to the Savannah River Site's (SRS) 1992 and 2000 Resource Conservation and Recovery Act (RCRA) Part B Permit Renewal Applications for Volume VII. The volume details operations at the Site's Mixed Waste Management Facility (MWMF).

This revision (Rev. 2) is in response to a Notice of Deficiency issued by SCDHEC. The revision contains updated pages and comments on a previously submitted revision, a completely revised Exposure Information Report and Southwest Plume Area irrigation and industrial controls components post-construction details.

This notice begins a 60-day public comment period. More information, including the actual permit applications, is available for review and copying at the US DOE Public Reading Room located in the University of South Carolina-Aiken library, or by contacting personnel listed at the end of this article. The permittees' compliance history during the life of the permits being modified is available from the Agency contact person.

A public meeting will be held March 8 at 3:30 p.m. at the Aiken County Public Library. Representatives from SRS will be available to answer questions. Written comments may be sent to SCDHEC. All comments will be considered in the final decision.

For more information contact:

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Send your comments to
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Division of Hazardous and Infectious Waste
Bureau of Land and Waste Management
SC Department of Health and Environmental Control
2600 Bull Street

January 2001 CAB meeting yields new members, new committee chairs and two recommendations

During the January SRS Citizens Advisory Board (CAB) meeting, the following eight new CAB members were elected to the Board:

David Adcock, Columbia, S.C.

Meryl Alalof, Martinez, Ga.

Walter Becker, Hilton Head, S.C.

Nancy Ann Ciehanski, Bluffton, S.C.

Gerald Devitt, Aiken, SC.

Vera Barnes Jordan, Augusta, Ga.

JG Long, Martinez, Ga.

Heather Simmons, Allendale, S.C.

The following 2001 CAB committee chairs were also elected:

Administrative Committee
Lola Richardson

Education Committee
Jean Sulc

Environmental Remediation Committee
Jimmy Mackey

Nuclear Materials Committee
Ken Goad

Strategic & Long Term Issues
Mel Galin

Waste Management Committee
Wade Waters

Recommendation 135
High Level Waste Annulus Cleaning

Concerned that annulus cleaning should be a higher priority for the Site, the SRS CAB recommends that:

1. Savannah River Site (SRS) develop, test and have a method for annuli cleaning ready for use no later than 2007.
2. SRS develop a High Level Waste (HLW) tank annulus-cleaning plan with a schedule for demonstration of elements of the program to meet the above date and present the plan to the Waste Management Committee before the end of July 2001.
3. SRS provide periodic HLW tank annulus cleaning program updates to the Waste Management Committee containing applicable technologies and funding status.

Recommendation 136
Technology Investigation for PUREX Treatment and Incineration

The SRS CAB has been following closely the issues surrounding technology investigations to PUREX treatment at SRS and the DOE-Headquarters (HQ) investigations related to incineration. Those investigations are led by a panel of independent scientific experts (known as the Blue Ribbon Panel) (BRP), who are exploring technological alternatives to incineration and a Headquarters Study Team, which is assessing the demand for incineration within the DOE complex versus commercial treatment methods (including incineration) potentially available for onsite use. The SRS CAB made the following recommendations to DOE-HQ and DOE-SR, respectively.

· DOE-HQ use the alternative technology recommendation from the Blue Ribbon Panel (BRP) to address specific waste streams at the Idaho National Engineering and Environmental Laboratory (INEEL) and not expand the BRP's evaluations to different waste streams at SRS.

· The Headquarters Study Team consider operational improvements to existing DOE incineration technologies in evaluating commercial treatment methods.

· DOE-SR continues to include incineration or, more specifically, the enhancement of Consolidated Incineration Facility (CIF) in its investigation for the best available technology to treat PUREX waste.

· DOE-SR considers and justifies any potential delays in the treatment of PUREX waste caused by using new emerging technology versus the use of the already existing CIF.

Both deal with plutonium stabilization/storage

Two amended RODS impact SRS

Two separate Records of Decision (ROD) recently amended have impacts at SRS. On December 12, 1995 DOE issued a ROD for the *Interim Management of Nuclear Materials Final Environmental Impact Statement* (EIS). In this decision, DOE decided to construct a new facility, the Actinide Packaging and Storage Facility (APSF) to prepare, package and store plutonium oxide. The amended ROD of January 26, 2001, notifies the public that DOE is now canceling the APSF project and instead will install the stabilization and packaging capability in an existing Site building, 235-F, and will also use that building to store materials pending disposition.

The second amended ROD dealt with the *Management of Certain Plutonium Residues and Scrub Alloy stored at the Rocky Flats Environmental Technology Site Final EIS*. DOE decided in December 1998 to ship 315 kilograms of plutonium flouride residues (containing approximately 142 kilograms of plutonium) from Rocky Flats to SRS for processing and storage pending disposition. In the amended ROD released on January 18, 2001, DOE changed that approach and will now ship that material to the Waste Isolation Pilot Plant in New Mexico for disposal. This action will help avoid delays in closing the Rocky Flats Site.

Copies of National Environmental Policy Act (NEPA) documents can be accessed from the DOE's NEPA web site at http://www.tis.eh.doe.gov/nepa, or by contacting the Center for Environmental Management at 1-800-736-3282. For more details, you may also contact Mr. Andrew Grainger, DOE-SR NEPA Compliance Officer, by calling 1-800-881-7292 or by e-mail to nepa@srs.gov.

Public may view *SRS NEPA Planning Summary*

The Department of Energy-Savannah River Operations Office (SR) has prepared the 2001 version of the annual *SRS NEPA Planning Summary* in accordance with DOE Order 451.1B. This document, which is available to the public, will describe the status of ongoing NEPA compliance activities, status of environmental asssessments (EA) and environmental impact statements (EIS) and the planned cost and schedule of each NEPA review.

Currently, Savannah River Site (SRS) is preparing two EAs and anticipates preparation of one or more additional EAs over the next 12 months. Two EISs are currently being prepared. Although no other site-specific EISs for SRS are anticipated over the next 24 months, preliminary planning for two programmatic EISs that will impact future missions at the Site has begun.

The cost information included in the report is current through December 2000. The document is available at the SRS Homepage Address, http://www.srs.gov/general/sci-tech/nepa/NEPA.HTML. To request a hard copy, contact Jim Moore at 1-800-249-8155 or by e-mail to jim02.moore@srs.gov.

Current NEPA actions affecting SRS

• ***Offsite Transportation of Certain Low-Level and Mixed Radioactive Waste from Savannah River Site (SRS) for Treatment and Disposal at Commercial and Government Facilities (DOE/EA-1308)*** The environmental assessment (EA) will analyze the potential environmental consequences associated with transporting certain low-level and mixed low-level radioactive waste to offsite commercial and government facilities for treatment and/or final disposal. These facilities are located in the states of Idaho, Nevada, Tennessee, Texas, Utah, and Washington. The draft EA was distributed on September 13 for public comment. The final EA and either a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an environmental impact statement (EIS) are expected in February.

• ***Evaluate an Alternative Approach for the Defense Waste Processing Facility (DWPF) Glass Waste Canister Storage Facility at SRS (DOE/EA-1327)*** The EA will analyze potential environmental consequences associated with building and operating onsite above-ground concrete pads for casks containing DWPF canisters. The storage casks would be made using SRS's inventory of depleted uranium trioxide powder. The action would significantly reduce the onsite inventory of deplected uranium trioxide powder. The contracting strategy has been reevaluated and the EA is expected to be revised and available for public review in March 2001.

• ***Removal, Transportation and Storage of Strontium-90 Radioisotopic Thermoelectric Generators (RTG) (DOE/EA-1351)*** This EA is being developed jointly by DOE and the U.S. Air Force. It addresses the (1) removal and transportation of 10 Strontium-90 RTGs from Burnt Mountain Seismic Array Laboratory in Alaska to a DOE site or an Air Force facility, and (2) long-term storage of the 10 identified plus about 50 other RTGs. The draft EA is expected in March (see article on page 2).

• ***SRS High Level Waste Tank (HLW) Closure (DOE/EIS-0303)*** The proposed action is to close the SRS HLW Tanks in accordance with applicable laws, regulations, DOE Orders and South Carolina Department of Health and Environmental Control (SCDHEC) permit requirements. The draft EIS was released in November 2000. The public comment period was extended to January 23, 2001, with public meetings held in early January 2001.

• ***SRS Salt Disposition Alternative SEIS (DOE/EIS-0082-S2)*** The proposed action is to construct and operate a process to replace In-Tank Precipation as part of the SRS High Level Waste Management System. The draft EIS is expected in April 2001, with the final expected in June 2001.

• ***Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Waste at Yucca Mountain (DOE/EIS-0250)*** This EIS will assess the potential environmental impacts from construction, operation, and closure of a Nuclear Regulatory Commission-(NRC) licensed geologic repository for disposal of spent nuclear fuel and high level waste. The draft EIS was released in August 1999. The final EIS is expected in late 2001.

EIS - Environmental Impact Statement
SEIS - Supplemental Environmental Impact Statement
EA - Environmental Assessment
FONSI - Finding of No Significant Impact
ROD - Record of Decision
NOI - Notice of Intent

DOE, EPA, SCDHEC select interim remedial action for Site's A-Area Burning/Rubble pits

Department of Energy (DOE), Environmental Protection Agency (EPA), and South Carolina Department of Health and Environmental Control (SCDHEC) representatives have selected an interim remedial action for SRS's A-Area Burning / Rubble Pits and Rubble Pit Operable Unit. A 30-day public comment period for the Interim Action/Proposed Plan was held from December 21, 1999, to January 19, 2000. The interim remedial decision is documented in the Interim Record of Decision document. This document includes a responsiveness summary that addresses any public comments submitted to SRS on the action. The DOE has worked with EPA and SCDHEC to ensure the interim remedial action is consistent with all applicable environmental requirements. An interim action is proposed because of the uncertainty of the groundwater remediation within the overall unit remediation strategy. The interim remedial action selected by the three agencies includes the following actions:

Surface Soil: The preferred final alternative for soil remediation is the installation of a minimum one-foot thick soil cover over Pit 731-2A with Institutional Controls to maintain industrial future land use. This is a cost-effective alternative that will eliminate risk to the current workers during groundwater remediation. In addition, this action would be sufficient for use as the final remedy for the source term.

Groundwater: The preferred interim alternative for groundwater remediation consists of two stages. In the first stage, 10 active air sparging wells will be used to strip volatile organic compounds (VOCs) from the groundwater and a passive soil vapor extraction (SVE) system (e.g., BaroBalls™ wells) will be used to remove the VOC vapors from the unsaturated soils above the groundwater to the atmosphere. This stage will be operated for approximately 12 months. During this time, operating data and effectiveness monitoring data will be gathered to determine the suitability of this system for remediating the groundwater plume. Based on the information obtained during the first stage, the system will be supplemented during the second stage with additional air sparging wells, and the vapor extraction system may be converted to an active SVE system, if necessary. Nutrient injection and carbon adsorption units may also be added to the system during the second stage. The second stage would also be operated for approximately 12 months.

Review of Interim RODs and Facts Sheets available

Copies of the Interim Record of Decisions are available in the Administrative Record. The Administrative Record is available in the information repositories listed below. Copies of the preconstruction fact sheet are also located at the following locations:

Department of Energy (DOE) Public Reading Room at the Gregg-Graniteville Library at the University of South Carolina-Aiken campus in Aiken, SC; and
Thomas Cooper Library Government Documents Department at the University of South Carolina in Columbia, SC.

Copies of the Interim Record of Decision are also available at the following:
Reese Library at Augusta State University in Augusta, GA; and
Asa H. Gordon Library at Savannah State University in Savannah, GA.

The Interim Record of Decisions will be available on the Internet at the SRS Home Page (http://www.srs.gov), under "Happening Now," (http://www.srs.gov/general/srs-home.htm) and on the SRS Environmental Restoration Home Page, under "Public Involvement," (http://www.srs.gov/general/srenviro/erd/pub/pubinv.html).

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Miscellaneous Chemical Basin/Metals Burning Pit

Second remedial action decided for waste sites

Department of Energy (DOE), Environmental Protection Agency (EPA), and South Carolina Department of Health and Environmental Control (SCDHEC) representatives have selected an interim remedial action for the SRS Miscellaneous Chemical Basin / Metals Burning Pit (MCB/MBP) Operable Unit. A 30-day public comment period for the Interim Action/Proposed Plan was held from January 29, 1999, to February 27, 1999. The interim remedial decision is documented in the Interim Record of Decision document. This document includes a responsiveness summary that addresses any public comments submitted to SRS on the action. DOE has worked with EPA and SCDHEC to ensure the interim remedial action is consistent with all applicable environmental requirements. An interim action is proposed because of the uncertainty of the groundwater remediation within the overall unit remediation strategy. The remedial action:

Surface and Subsurface Soil: Soil Excavation, Offsite Disposal, and Institutional Controls for the MCB to remove contaminated soil above the ecological and industrial risk level to a one-foot depth, and Soil Excavation and Offsite Disposal for the MBP to remove aluminum-contaminated soil above the site-specific maximum background level to a four-foot depth. The excavated areas at the MCB and MBP will be covered with clean backfill to grade. This action would be sufficient for use as the final remedy for the source term.

Vadose Zone Soil: Active and Passive Soil Vapor Extraction (SVE) - The volatile organic compounds (VOCs) will be extracted as vapor through a series of vertical extraction wells. Active SVE wells (equipped with blowers to draw air through the soil to remove VOCs) will be located where the concentration of VOCs is highest. Passive SVE (wells that take advantage of natural barometric pressure changes to draw air through the soil to remove VOCs) will be located in lower concentration areas. This action would be sufficient to use as the final remedy for the vadose zone soil.

Groundwater: In Situ Air Stripping and Monitoring. In situ air stripping consists of recirculation wells that would set up a groundwater recirculating cell within the contaminated aquifer. As the air passes through the groundwater within the wells, the VOCs volatilize within the well and are vented to the surface.

Final remedy selected for SRS Operable Unit

Department of Energy (DOE), Environmental Protection Agency (EPA), and South Carolina Department of Health and Environmental Control (SCDHEC) managers announce the completion of the final design of the remedy selected for the L and P Bingham Pump Outage Pits (BPOP) Operable Unit and the availability of a Pre-construction Fact Sheet. This fact sheet provides a description of the remedy selected for the L and P Bingham Pump Outage Pits Operable Unit at Savannah River Site (SRS).

The L and P Bingham Pump Outage Pits are located in the south central portion of the SRS. The L-Area BPOPs are located north of the L Reactor. The P-Area BPOP is located north of P Reactor. The SRS is located in Aiken, Allendale, and Barnwell counties of western South Carolina, approximately 25 miles southeast of Augusta, Georgia.

The L-Area and P-Area BPOPs are burial pits containing waste debris generated by major modifications to primary and secondary reactor cooling systems including the primary system Bingham Pumps in 1957 and 1958. The L-Area BPOPs consist of two pits in an area approximately 800 X 22 feet. The P-Area BPOP consists of one pit which is approximately 475 X 26 feet. The waste consists of miscellaneous construction materials such as pipes, cables, ladders, and concrete. The waste is characterized as Low Level Threat Waste due to absence of free liquids or mobile or highly toxic material.

The remedial action selected in the Record of Decision Alternative Selection for the L-Area and P-Area BPOPs will be applied. The remedy consists of one component:

- Land use controls (institutional controls) will be used to prevent contact, removal, or excavation of buried waste in the area and precludes residential use of the area.

Groundwater does not pose a threat to human health and neither remediation nor restrictions are required. This remedy will be the final remedy for this Operable Unit. No health hazards will be posed to off-site communities as a result of this remedial action. The Preconstruction Fact Sheet is available at the locations listed on page 6.

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